

Chapter 5 Review

Please Complete p332- 333
q. 1-8

Chapter Problem Wrap-up p.335

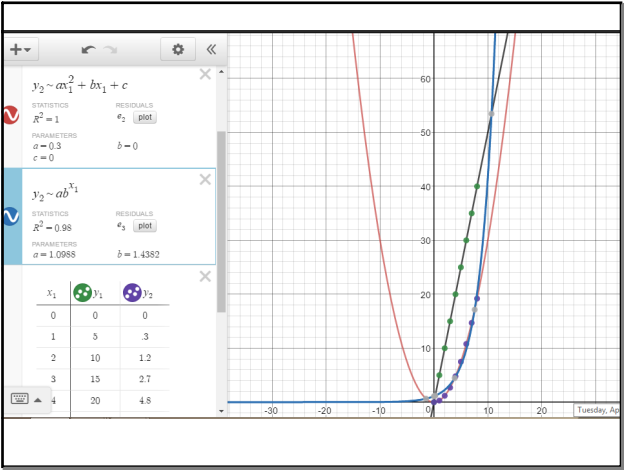
Chapter Problem Wrap-Up

Susan has finished her training period at the fitness centre and has been appointed assistant manager. To celebrate, the manager has challenged her to a 100-m race around the indoor track. The manager will run at a constant speed. Susan will ride her bicycle, starting from rest, and increasing her speed at a uniform rate over the race. The positions for the first 8 s of the race are shown in the table.

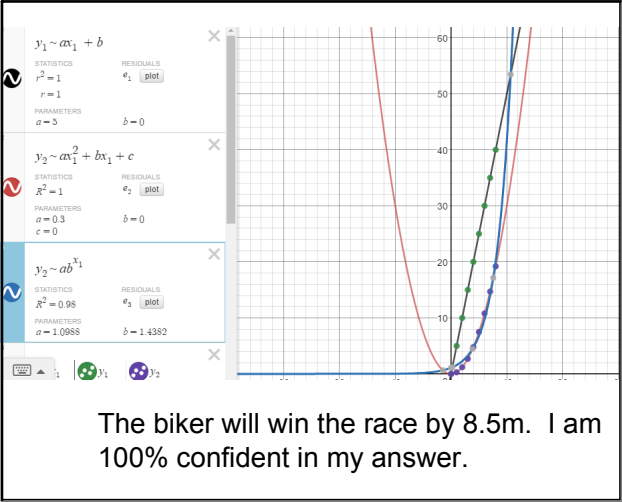
Time (s)	Manager's Distance (m)	Susan's Distance (m)
0	0.0	0.0
1	5.0	0.3
2	10.0	1.2
3	15.0	2.7
4	20.0	4.8
5	25.0	7.5
6	30.0	10.8
7	35.0	14.7
8	40.0	19.2

Use the skills that you have learned in this chapter to model each racer using a graph. Extend each graph to determine who will win the race and by how many metres. Is it possible that the other person might have won the race if the race had been over a different distance? Justify your answer mathematically.

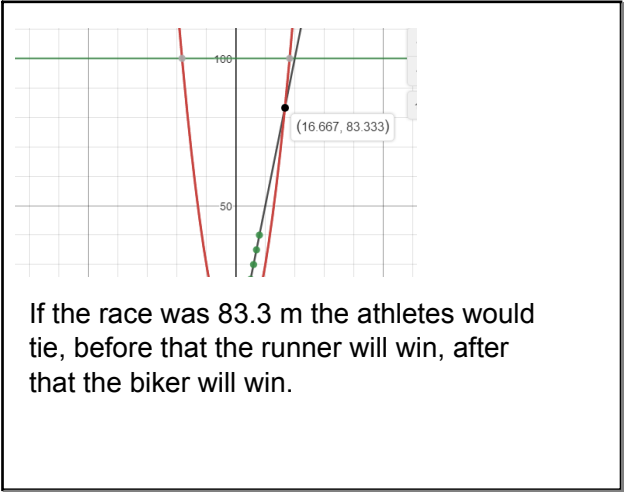
Apr 5-7:34 AM



Apr 11-9:53 AM



Apr 11-9:53 AM



If the race was 83.3 m the athletes would tie, before that the runner will win, after that the biker will win.

Apr 11-10:21 AM